



# 14" X 43" WOOD LATHE WITH STAND

**Model 98676**

## SET UP AND OPERATING INSTRUCTIONS



Distributed exclusively by Harbor Freight Tools®.

3491 Mission Oaks Blvd., Camarillo, CA 93011

Visit our website at: <http://www.harborfreight.com>



**Read this material before using this product.  
Failure to do so can result in serious injury.  
SAVE THIS MANUAL.**

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**For technical questions or replacement parts, please call 1-800-444-3353.**

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## SAVE THIS MANUAL

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Keep this manual for the safety warnings and precautions, assembly, operating, inspection, maintenance and cleaning procedures. Write the product's serial number in the back of the manual (or month and year of purchase if product has no number). Keep this manual and the receipt in a safe and dry place for future reference.

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## IMPORTANT SAFETY INFORMATION

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In this manual, on the labeling, and all other information provided with this product:



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, will result in death or serious injury.

### **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, could result in death or serious injury.

### **CAUTION**

**CAUTION**, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to personal injury.

### **CAUTION**

**CAUTION**, without the safety alert symbol, is used to address practices not related to personal injury.

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## General Power Tool Safety Warnings



**WARNING** Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference. The term "power tool" in the warnings refers to your mains-operated (corded) power tool.

1. **Work area safety**
  - a. **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
  - b. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
  - c. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.
2. **Electrical safety**
  - a. **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with grounded power tools.**

*Unmodified plugs and matching outlets will reduce risk of electric shock.*

- b. Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** *There is an increased risk of electric shock if your body is grounded.*
  - c. Do not expose power tools to rain or wet conditions.** *Water entering a power tool will increase the risk of electric shock.*
  - d. Do not abuse the cord. Never use the cord to unplug the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** *Damaged or entangled cords increase the risk of electric shock.*
  - e. If operating a power tool in a damp location is unavoidable, use a Ground Fault Circuit Interrupter (GFCI) protected supply. Use of a GFCI reduces the risk of electric shock.**
- 3. Personal safety**
- a. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** *A moment of inattention while operating power tools may result in serious personal injury.*
  - b. Use safety equipment. Always wear ANSI-approved eye protection.** *Safety equipment such as NIOSH-approved dust mask/respirator, full face shield, heavy-duty work gloves, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.*
  - c. Remove any adjusting key or wrench before turning the power tool on.** *A wrench or a key left attached to a rotating part of the power tool may result in personal injury.*
  - d. Do not overreach. Keep proper footing and balance at all times.** *This enables better control of the power tool in unexpected situations.*
  - e. Dress properly. Do not wear loose clothing or jewelry. Keep your hair, clothing and gloves away from moving parts.** *Loose clothes, jewelry or long hair can be caught in moving parts.*
  - f. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** *Use of these devices can reduce dust-related hazards.*
- 4. Power tool use and care**
- a. Do not force the power tool. Use the correct power tool for your application.** *The correct power tool will do the job better and safer at the rate for which it was designed.*
  - b. Do not use the power tool if the switch does not turn it on and off.** *Any power tool that cannot be controlled with the switch is dangerous and must be repaired.*
  - c. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools.** *Such preventive safety measures reduce the risk of starting the power tool accidentally.*
  - d. Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power**

**tool or these instructions to operate the power tool.** *Power tools are dangerous in the hands of untrained users.*

**e. Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** *Many accidents are caused by poorly maintained power tools.*

**f. Keep cutting tools sharp and clean.** *Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.*

**g. Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** *Use of the power tool for operations different from those intended could result in a hazardous situation.*

## **6. Service**

**a. Have your power tool serviced by a qualified repair person using only identical replacement parts.** *This will ensure that the safety of the power tool is maintained.*

### **Lathe Safety Warnings**

1. Maintain labels and nameplates on the Lathe. These carry important safety information. If unreadable or missing, contact Harbor Freight Tools for a replacement.
2. Do not run the Lathe without its covers and guards in place.

3. Tighten all locks before operating.
4. Do not mount a split workpiece.
5. Use the lowest speed when starting a new workpiece.
6. Always stop the Lathe at its slowest speed. If the Lathe is run so fast that it vibrates, there is a risk that the workpiece will be thrown or the cutting tool jerked from your hands.
7. Always rotate the workpiece by hand before turning on the Lathe. If the workpiece strikes the tool rest, it could split and be thrown out of the Lathe.
8. Do not allow cutting tools to bite into the workpiece. The wood could be split or thrown from the Lathe.
9. Always position the tool rest above the centerline of the Lathe when shaping a piece of stock.
10. Before attaching a workpiece to the faceplate, always rough it out to make it as round as possible. This minimizes the vibrations while the piece is being turned. Always fasten the workpiece securely to the faceplate. Failure to do so could result in the workpiece being thrown away from the Lathe.
11. Remove all loose knots in the workpiece before mounting between the centers or on the faceplate.
12. Position your hands so they will not slip onto the workpiece when the Lathe is running.
13. Use a brush or compressed air to remove wood shavings; never your hands. The wood shavings will be sharp.

14. Avoid unintentional starting. Prepare to begin work before turning on the tool.
15. Do not reach across the Lathe while it is running.
16. Industrial applications must follow OSHA guidelines.
17. Do not use the Lathe if it is off-balance, or the workpiece is not properly centered.
18. Only feed workpiece into a cutting tool against the direction of rotation. The workpiece must always be rotating toward you.
19. Do not leave the tool unattended when it is plugged into an electrical outlet. Turn off the tool, and unplug it from its electrical outlet before leaving.
20. This product is not a toy. Keep it out of reach of children.
21. People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure. In addition, people with pacemakers should:
  - Avoid operating alone.
  - Do not use with power switch locked on.
  - Properly maintain and inspect to avoid electrical shock.
  - Any power cord must be properly grounded. Ground Fault Circuit Interrupter (GFCI) should also be implemented – it prevents sustained electrical shock.
22. Some dust created by power sanding, sawing, grinding, drilling, and

other construction activities, contains chemicals known [to the State of California] to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- Lead from lead-based paints
- Crystalline silica from bricks and cement or other masonry products
- Arsenic and chromium from chemically treated lumber

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles. (California Health & Safety Code § 25249.5, *et seq.*)

23. The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.



**SAVE THESE INSTRUCTIONS.**

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## GROUNDING

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### **⚠️ WARNING** TO PREVENT ELECTRIC SHOCK



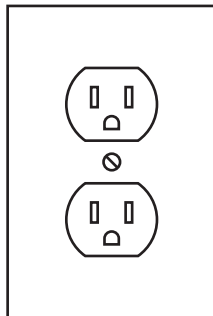
#### AND DEATH FROM INCORRECT GROUNDING WIRE CONNECTION:

Check with a qualified electrician if you are in doubt as to whether the outlet is properly grounded. Do not modify the power cord plug provided with the tool. Never remove the grounding prong from the plug. Do not use the tool if the power cord or plug is damaged. If damaged, have it repaired by a service facility before use. If the plug will not fit the outlet, have a proper outlet installed by a qualified electrician.

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### Grounded Tools: Tools with Three Prong Plugs

This product uses a 3-prong plug.



#### 3-Prong Plug and Outlet

1. Tools marked with “Grounding Required” have a three wire cord and three prong grounding plug. The plug must be connected to a properly grounded outlet. If the tool should electrically malfunction or break down, grounding provides a low resistance path to carry electricity away from the user, reducing the risk

of electric shock. (See 3-Prong Plug and Outlet.)

2. The grounding prong in the plug is connected through the green wire inside the cord to the grounding system in the tool. The green wire in the cord must be the only wire connected to the tool’s grounding system and must never be attached to an electrically “live” terminal. (See 3-Prong Plug and Outlet.)
3. The tool must be plugged into an appropriate outlet, properly installed and grounded in accordance with all codes and ordinances. The plug and outlet should look like those in the preceding illustration. (See 3-Prong Plug and Outlet.)

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## EXTENSION CORDS

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1. **Grounded** tools require a three wire extension cord. **Double Insulated** tools can use either a two or three wire extension cord.
2. As the distance from the supply outlet increases, you must use a heavier gauge extension cord. Using extension cords with inadequately sized wire causes a serious drop in voltage, resulting in loss of power and possible tool damage. (See Table A.) The smaller the gauge number of the wire, the greater the capacity of the cord. For example, a 14 gauge cord can carry a higher current than a 16 gauge cord. (See Table A.)
3. When using more than one extension cord to make up the total length, make sure each cord contains at






least the minimum wire size required.  
(See Table A.)

4. If you are using one extension cord for more than one tool, add the nameplate amperes and use the sum to determine the required minimum cord size. (See Table A.)
5. If you are using an extension cord outdoors, make sure it is marked with the suffix "W-A" ("W" in Canada) to indicate it is acceptable for outdoor use.
6. Make sure the extension cord is properly wired and in good electrical condition. Always replace a damaged extension cord or have it repaired by a qualified electrician before using it.
7. Protect the extension cords from sharp objects, excessive heat, and damp or wet areas.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120/240 VOLT)					
NAMEPLATE AMPERES (at full load)	EXTENSION CORD LENGTH				
	25'	50'	75'	100'	150'
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

**TABLE A** \* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

## SYMBOLOLOGY

	Double Insulated
	Canadian Standards Association
	Underwriters Laboratories, Inc.
	Volts Alternating Current
	Amperes
$n_0$ xxxx/min.	No Load Revolutions per Minute (RPM)

## SPECIFICATIONS

Electrical Requirements	120 V~ / 60 Hz Power Cord: 18 AWG X 3C 9.6 No Load Amps
Lathe Type	Wood Cutting
Motor	1.0 HP
Motor Speed	1720 RPM
Spindle Speeds (RPM)	670, 840, 1040, 1230, 1480, 1650, 1770, 2100, 2420, 2900
Spindle Taper	MT-2
Spindle Thread	1" Diameter x 8 TPI x 7/8" Long
Headstock Adjustments	Rotates at 0°, 60°, 90°, 120°, 180°
Tail Stock Quill Travel	2-7/16"
Tail Stock Quill Taper	MT-2
Tool Rest Travel	1-7/16"
Swing Over Bed	14-5/8"
Drive Method	Belt & Pulley
Belt Type	0-625 V-Belt
Accessories	3mm, 4mm, 6mm Hex Wrenches (1 ea.) Dead Center (Qty. 1) Faceplate (Qty. 1) Flat Wrenches (Qty. 2)
Net Weight	282.2 Pounds



## UNPACKING

When unpacking, check to make sure that the item is intact and undamaged. If any parts are missing or broken, please call Harbor Freight Tools at the number shown on the cover of this manual as soon as possible.

## ASSEMBLY INSTRUCTIONS



Read the **ENTIRE IMPORTANT SAFETY INFORMATION** section at the beginning of this manual including all text under subheadings therein before set up or use of this product.

### **WARNING**

**TO PREVENT SERIOUS INJURY**

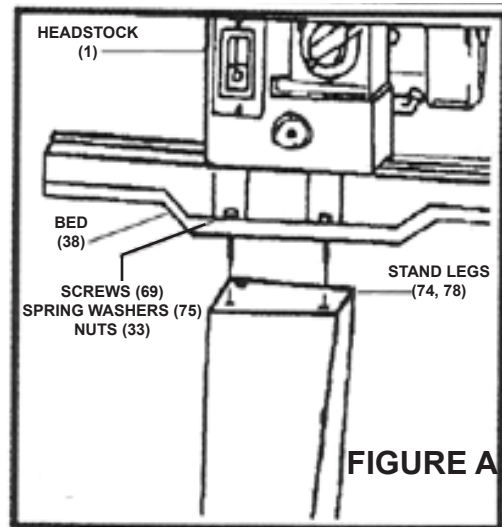
**FROM ACCIDENTAL OPERATION:**

Turn the Power Switch (71) of the Lathe to its "OFF" position and unplug the tool from its electrical outlet before assembling or making any adjustments.

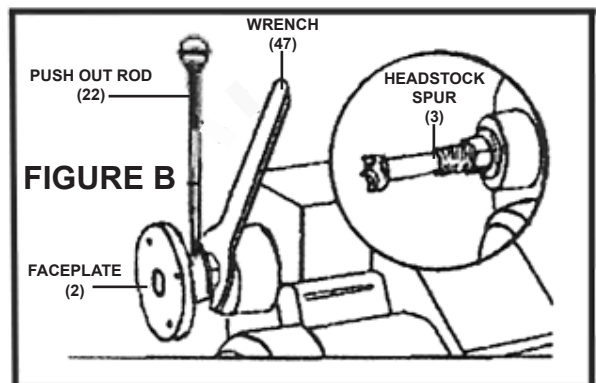
**Note:** For additional information regarding the parts listed in the following pages, refer to the Assembly Diagram near the end of this manual.

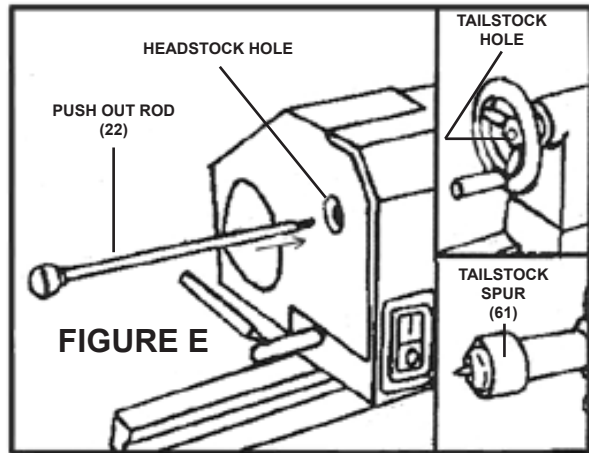
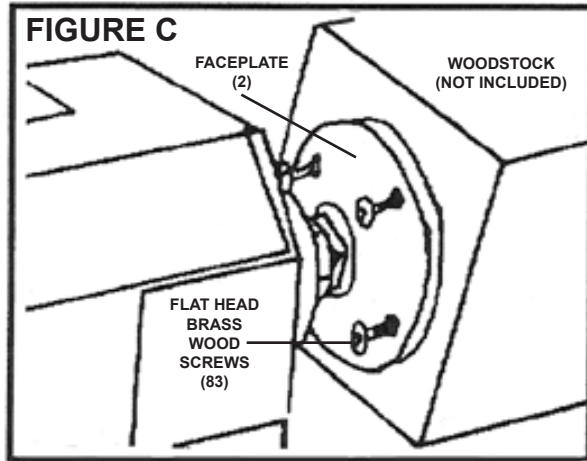
1. NOTE: This product is very heavy (282.2 lb.). The following assembly procedures will require at least two additional personnel and a proper lifting device.

2. Place the Bed (38) assembly on the two Stand Legs (74, 78). Align the mounting holes in the Bed assembly with the mounting holes at the tops of the two Stand Legs. Secure the Bed assembly to the two Stand Legs using eight Screws (69), eight Spring Washers (75), and eight Nuts (33). Then set the Headstock (1) upon the Bed assembly. (See Figure A.)

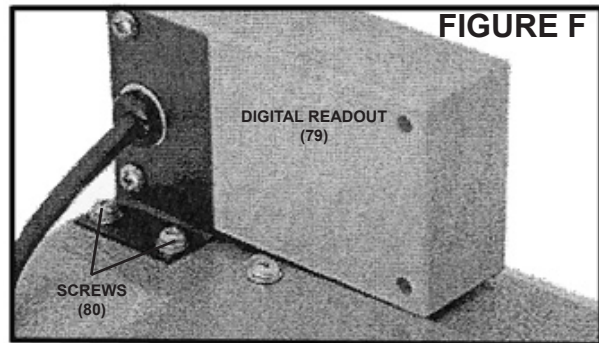


3. To attach the Faceplate (2), use the Push Out Rod (22) and Wrench (47) to firmly thread the Faceplate onto the Spindle (4). To attach a work-piece to the Faceplate, use the four Flat Head Brass Wood Screws (83). (See Figures B below, and C next page.)

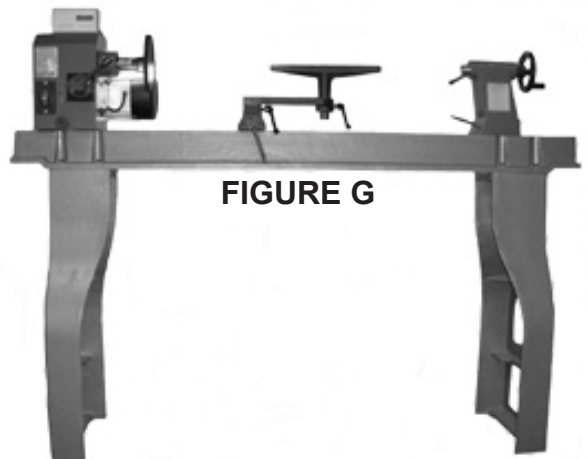
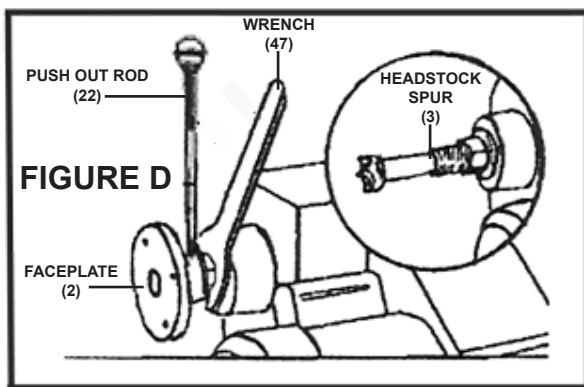




4. To install the Headstock Spur (3) and Tailstock Spur (61), remove the Faceplate (2) from the Headstock Spindle (4) using the Push Out Rod (22) and Wrench (47). Insert the Headstock Spur into the Spindle hole, then insert the Tailstock Spur into the Tailstock hole. To remove either the Headstock Spur or Tailstock Spur insert the Push Out Rod into the hole at the opposite end of the Headstock or Tailstock. (See Figures D and E.)



6. The Lathe is now assembled. (See Figure G.)



5. To install the Digital Readout (79), use the two Screws (80). (See Figure F.)

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## WORK AREA SET UP

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1. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent injury and distraction.
2. The Lathe will need to be located on a surface capable of bearing the combined weight of the Lathe and intended workpieces. The surface must be able to withstand the vibration generated by the Lathe during operation.
3. The Lathe must be completely level, left-to-right **and** front-to-back, or the Lathe will not rotate properly and may become damaged.
4. The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove the coating with a solvent cleaner or citrus-based degreaser. Avoid chlorine-based solvents since they will damage the paint.
5. Route the power cord along a safe route to reach the work area without creating a tripping hazard or exposing the power cord to possible damage.

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## DEFINITION OF TERMS

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**Apron:** The front part of the carriage assembly where the carriage handwheel is mounted.

**Bed:** Main supporting casting running the length of the lathe

**Between Centers:** A dimension representing the maximum length of a workpiece that can be turned between centers. Also a method of

holding a workpiece by mounting it between the centers of the headstock and the tailstock spindles.

**Carriage:** The assembly that moves the tool rest along the ways.

**Center:** A precision ground tapered cylinder with a pointed tip and a Morse Taper shaft. Used in the tailstock to support the end of long workpieces. May also be used in the headstock spindle to support work between centers at both ends.

**Center Drill:** A short drill used to form pilot holes and countersunk holes.

**Centerline:** An imaginary line extending from the center of the spindle through the center of the tailstock ram, representing the central axis of the lathe around which the work rotates.

**Compound:** Movable platform where the tool post is mounted; it can be set at an angle to the workpiece (also known as compound slide and compound rest).

**Compound Handwheel:** The wheel used to move the compound slide in and out.

**Cross Slide Handwheel:** The wheel used to move the cross slide in and out (also called cross feed).

**Faceplate:** A metal plate with a flat face-mounted spindle to hold irregularly shaped work.

**Facing:** A lathe operation in which wood is removed from the end of a workpiece to create a smooth surface.

**Gib:** An adjustable length of steel or brass with a diamond shaped cross-section that engages one side of the dovetail slide. Used to adjust the dovetail for optimum tightness and to compensate for wear.

**Headstock:** The main casting mounted on the left end of the bed where the spindle is mounted. Houses the spindle gears.

**Morse Taper (MT):** A taper of specific dimensions used to mate matching male and female parts together tightly. The spindle has a #2 Morse Taper (MT-2) and the tailstock has a #2 Morse Taper (MT-2).

**Saddle:** An “H” shaped casting that rides along the ways. A main component of the carriage.

**Spindle:** Main rotating shaft on which the chuck is mounted. It passes through the headstock.

**Spindle Through-hole:** A dimension indicating the minimum diameter of the hole that passes through the spindle. A workpiece with a diameter smaller than this can pass through the spindle to work on longer pieces.

**Swing:** A dimension representing the largest diameter workpiece that a lathe can rotate. The 14” x 43” Lathe has a 14-5/8” swing, meaning that the maximum size workpiece that can rotate without hitting the bed is 14-5/8” in diameter.

**Tailstock:** Assembly that slides along the ways and can be locked in place. Used to hold long workpieces in place or to mount a drill chuck.

**Tailstock Handwheel:** Moves the tailstock in and out. Has a tapered internal bore to accept a #2 Morse Taper shank.

**Tool Post:** A device mounted on the compound that holds the cutting tool.

**Turning:** A lathe operation that removes wood from the outside diameter of the workpiece.

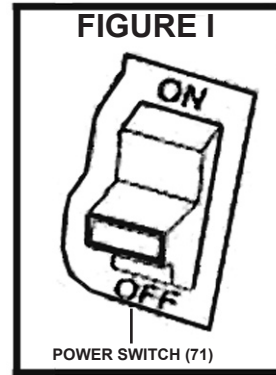
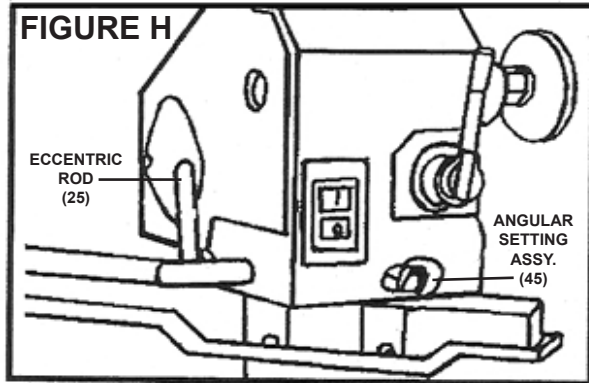
**Ways:** Surface along the top of the bed on which the saddle rides. The ways are aligned with the centerline of the lathe.

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## ADJUSTMENTS

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1. The Headstock (1) has *five* preset positions:
  - **0°** setting for all spindle turning applications.
  - **60°, 90°, and 120°** for use when making Faceplate turnings.
  - **180°** for use when making Faceplate turnings when using the Extension Bed and Toolrest.
2. To set the Headstock (1) at the desired position, turn the Angular Setting Assembly (45) until you have completed at least one rotation.
3. Pull out the Eccentric Rod (25). Rotate the entire Headstock (1) clockwise to the desired position. The Headstock will be locked in position when it “clicks” into one of the five preset settings. Then retighten the Angular Setting Assembly (45).  
**(See Figure H.)**



## OPERATING INSTRUCTIONS

1. The Lathe features a yellow Safety Switch on the Power Switch (71) to prevent unauthorized use. To turn the Lathe on, plug the Power Cord (76) into the nearest 120 volt, grounded, electrical outlet.
2. Insert the Safety Switch into the Power Switch. Move the Power Switch to the “**ON**” position. To turn the Lathe off, move the Power Switch to the “**OFF**” position. To lock the Power Switch in the “**OFF**” position, remove the Safety Switch and store it in a safe location. **(See Figure I.)**
3. The Motor (13) of the Lathe must be running before you can use the Speed Control Lever (48-4).
4. The Speed Control Lever (48-4) can be turned to one of the *ten* fixed speeds (670, 840, 1040, 1230, 1480, 1650, 1770, 2100, 2420, 2900 RPM).
5. To set the speed, pull back on the Speed Control Lever (48-4) and rotate the Lever to the next fixed speed. Use the Speed Label (49) to choose the desired Lathe speed.
6. Turn the Speed Control Lever (48-4) clockwise to increase the speed, and turn the Lever counterclockwise to decrease the speed.
7. You must move the Speed Control Lever (48-4) to the lowest speed setting before turning the Power Switch (71) off. **Otherwise, damage to the Lathe may occur.** **(See Figures J and K.)**

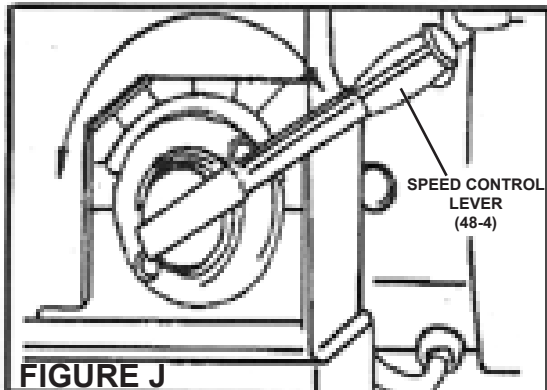


FIGURE J

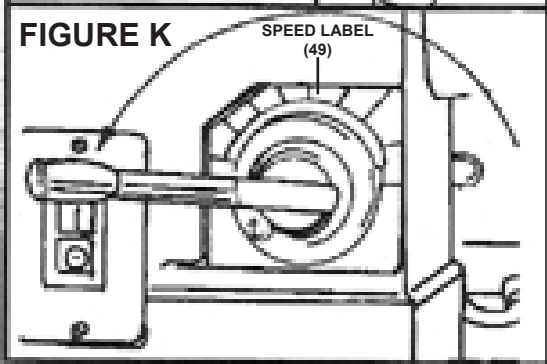


FIGURE K

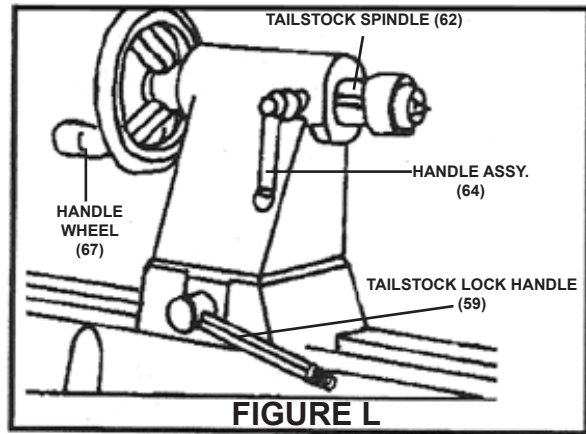
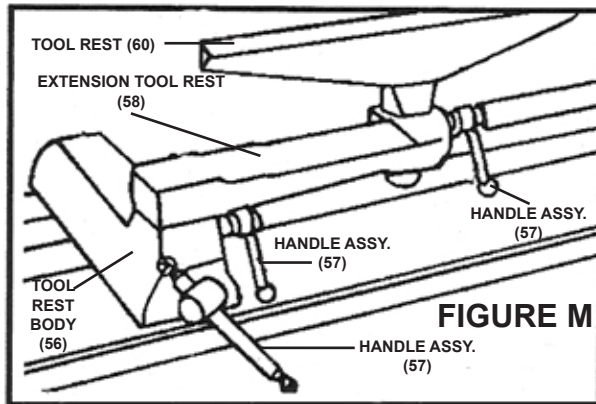
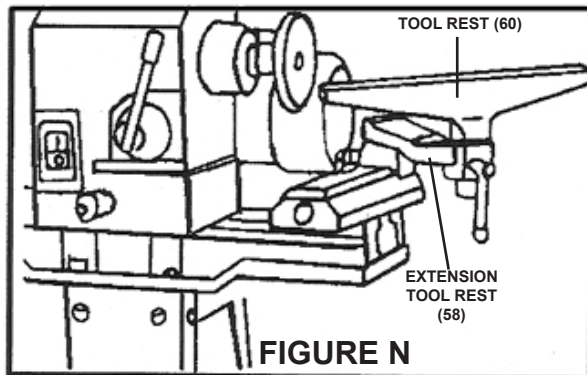


FIGURE L

8. Loosen the Tailstock Lock Handle (59) to move the Tailstock (65). Push the Tailstock to the desired position on the Bed (38). Then retighten the Tailstock Lock Handle to lock the Tailstock in position. **(See Figure L.)**
9. The Tailstock Spindle (62) can extend up to 2-7/16" from the Tailstock (65) housing. You can move the Tailstock Spindle (62) by loosening the Handle Assembly (64) and then turning the Handle Wheel (67). Make sure to retighten the Handle Assembly prior to turning on the Lathe. **(See Figure L.)**
10. The Tailstock Spindle (62) is hollow and can be accessed from the Handle Wheel (67) end. Use the Push Out Rod (22) to remove the center cup or to drill holes through the center of a workpiece. **(See Figure L.)**
11. The Tool Rest (60) can be used with or without the Extension Tool Rest (58). **(See Figure M, next page.)**
12. To move the Tool Rest Body (56), loosen the Handle Assembly (57), and move the Body to the left or right and back or forth. Then retighten the Handle Assembly when the Tool Rest Body is in the desired position. **(See Figure M, next page.)**
13. When using the Extension Tool Rest (58), make the necessary adjustments using the two Handle Assemblies (57) to position the Tool Rest (60). **(See Figure M, next page.)**
14. Tighten the Handle Assemblies (57) and make sure there is adequate clearance between the workpiece and the Tool Rest assembly before turning on the Lathe. **(See Figure M, next page.)**



15. The Tool Rest (60) can also be repositioned to the Extension Tool Rest (58) for use on outboard turnings. (See Figure N.)
16. **IMPORTANT:** Make sure the Tool Rest (60) is adjusted as close to the workpiece as possible. Rotate the workpiece by hand to check clearance before turning on the Lathe.




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## MAINTENANCE AND SERVICING

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Procedures not specifically explained in this manual must be performed only by a qualified technician.

### **⚠️ WARNING** TO PREVENT SERIOUS INJURY

#### **FROM ACCIDENTAL OPERATION:**


Turn the Power Switch (71) of the Lathe to its “OFF” position and unplug the tool from its electrical outlet before performing any inspection, maintenance, or cleaning procedures.

#### **TO PREVENT SERIOUS INJURY FROM TOOL FAILURE:**

**Do not use damaged equipment. If abnormal noise or vibration occurs, have the problem corrected before further use.**

1. **BEFORE EACH USE**, inspect the general condition of the Lathe. Check for loose screws, misalignment or binding of moving parts, cracked or broken parts, damaged electrical wiring, and any other condition that may affect its safe operation.
2. **AFTER USE**, clean external surfaces of the tool with clean cloth.
3. **DAILY**, lubricate all external moving parts with ISO 68 or SAE 20W oil.
4. Lubricate the Tailstock oiling point every five uses, or once per week if used frequently.
5. **⚠️ WARNING!** If the Power Cord (76) of this Lathe is damaged, it must be replaced only by a qualified service technician.

## TROUBLESHOOTING

Problem	Possible Cause	Possible Solution
Quality of cut is poor.	<ol style="list-style-type: none"> <li>1. Cutting tool is above workpiece center line.</li> <li>2. Lathe speed too slow.</li> <li>3. Cutting tool is dull.</li> <li>4. Cutting too aggressively.</li> </ol>	<ol style="list-style-type: none"> <li>1. Lower cutting tool to center line of workpiece.</li> <li>2. Increase lathe speed.</li> <li>3. Sharpen or replace cutting tool.</li> <li>4. Use a lighter touch.</li> </ol>
Excessive vibration when turning thin workpieces.	<ol style="list-style-type: none"> <li>1. Cutting too aggressively.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use a lighter touch.</li> </ol>
Excessive vibration when turning larger workpieces or bowls.	<ol style="list-style-type: none"> <li>1. Headstock and/or tailstock improperly located at ends of workpiece.</li> <li>2. Workpiece is unbalanced.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check for proper workpiece centers.</li> <li>2. Cut off stock until workpiece is balanced.</li> </ol>
Lathe will not turn on.	<ol style="list-style-type: none"> <li>1. Speed control lever not in its lowest speed setting.</li> <li>2. Electrical outlet not working or is of wrong voltage.</li> <li>3. Blown fuse or tripped circuit breaker.</li> </ol>	<ol style="list-style-type: none"> <li>1. Make sure speed control lever is turned to its lowest speed setting.</li> <li>2. Make sure lathe is plugged into a working, 120 volt, grounded, electrical outlet.</li> <li>3. Replace fuse or reset circuit breaker.</li> </ol>
Lathe will not turn off.	<ol style="list-style-type: none"> <li>1. Damaged or faulty power switch and/or internal wiring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Unplug the lathe from its electrical outlet immediately. Do not operate lathe until it is repaired by a qualified service technician.</li> </ol>
<p>Follow all safety precautions whenever diagnosing or servicing the Lathe.</p> <div style="text-align: center;">  </div>		

## PLEASE READ THE FOLLOWING CAREFULLY

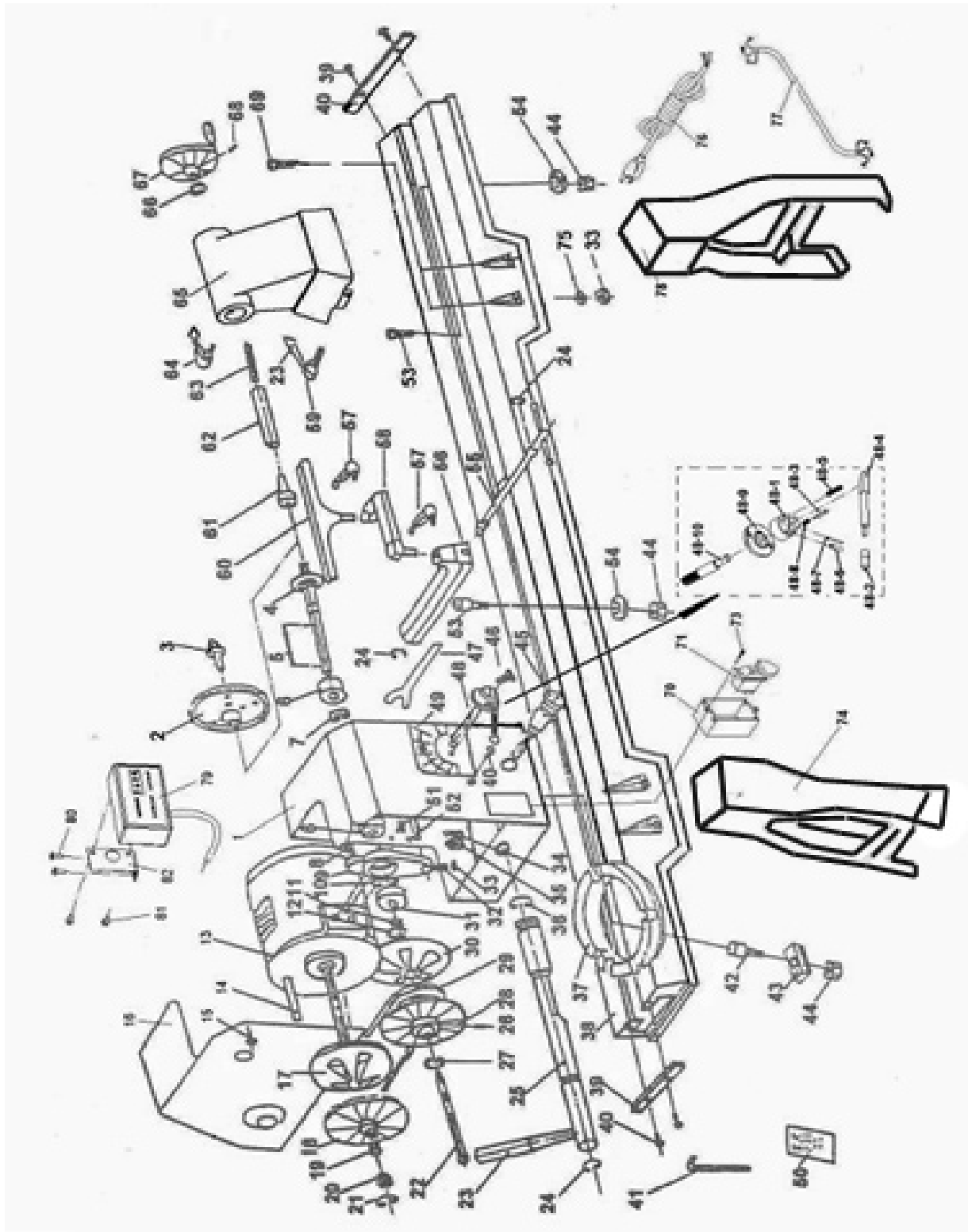
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## PARTS LIST

NO.	DESCRIPTION	Q'TY	NO.	DESCRIPTION	Q'TY
1	HEADSTOCK	1	47	WRENCH	1
2	FACEPLATE	1	48	GEAR ASSEMBLY	1
3	HEADSTOCK SPUR	1	48-1	SPRING BASE	1
4	SPINDLE	1	48-2	KNOB	1
5	KEY	1	48-3	BOLT	1
6	BEARING	2	48-4	SPEED CONTROL LEVER	1
7	"C"RING	2	48-5	SPRING--A	1
8	SPRING	1	48-6	SCREW	1
9	BRACKET-SHIFTING LEVER	1	48-7	PIN	1
10	"C"RING	1	48-8	SPRING--B	1
11	"C"RING	1	48-9	PLATE	1
12	"C"RING	1	48-10	GEAR	1
13	MOTOR	1	49	SPEED LABEL	1
14	KEY	1	50	INSTRUCTION MANUAL	1
15	SCREW	1	51	HEX SCREW	3
16	COVER-MOTOR	1	52	BACK	1
17	PULLEY-MOTOR(RIGHT)	1	53	BOLT-B	2
18	PULLEY-MOTOR(LEFT)	1	54	CLAMP-B	2
19	SPRING	1	55	ECCENTRIC ROD	1
20	SLEEVE	1	56	TOOL REST BODY	1
21	"C"RING	2	57	HANDLE ASSEMBLY	2
22	PUSH-OUT ROD	1	58	EXTENSION TOOL REST	1
23	KNOB	2	59	LOCK HANDLE-TAILSTOCK	1
24	"C"RING	3	60	TOOL REST	1
25	ECCENTRIC ROD	1	61	TAILSTOCK SPUR	1
26	SCREW	1	62	TAILSTOCK SPINDLE	1
27	"C"RING	1	63	TAIL STOCK SCREW	1
28	PULLEY-SPINDLE(LEFT)	1	64	HANDLE ASSEMBLY	1
29	V-BELT	1	65	TAILSTOCK	1
30	PULLEY-SPINDLE(RIGHT)	1	66	WASHER	1
31	BEARING	1	67	HANDLE WHEEL	1
32	NUT-LOCK	1	68	SCREW	1
33	NUT	9	69	SCREW	1
34	CLAMP	2	70	SWITCH BOX	1
35	NUT M4	2	71	SWITCH	1
36	"C"RING	1	73	SCREW	2
37	TURNING BASE	1	74	STAND LEG--I	1
38	BED	1	75	SPRING WASHER	8
39	BAFFLE	2	76	POWER CORD	1
40	SCREW	4	77	MOTOR POWER WIRE	1
41	HEX WRENCH	4	78	STAND LEG--II	1
42	BOLT-A	1	79	DIGITAL READOUT	1
43	CLAMP-A	1	80	SCREW	2
44	HEX NUT	3	81	SCREW	2
45	ANGULAR SETTING ASSEMBLY	1	82	BASE	1
46	SCREW	2			

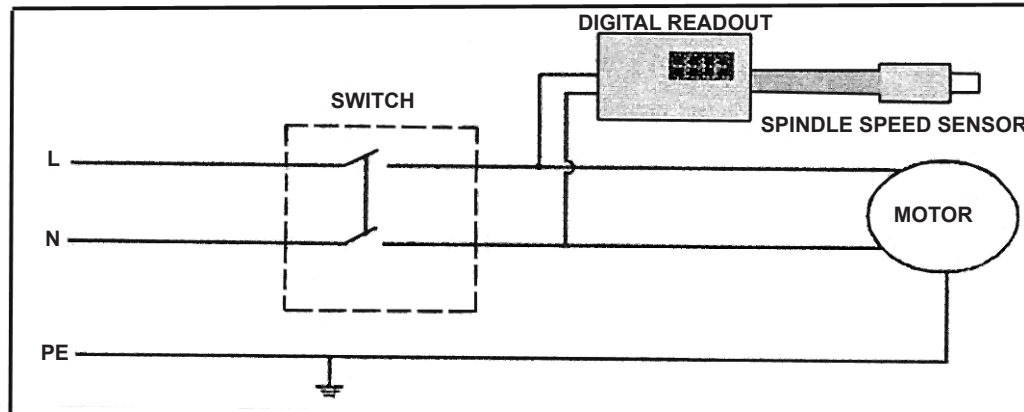
# ASSEMBLY DIAGRAM



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## WIRING DIAGRAM

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## LIMITED 1 YEAR / 90 DAY WARRANTY

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Harbor Freight Tools Co. makes every effort to assure that its products meet high quality and durability standards, and warrants to the original purchaser that for a period of ninety days from date of purchase that the engine/motor, the belts (if so equipped), and the blades (if so equipped) are free of defects in materials and workmanship. Harbor Freight Tools also warrants to the original purchaser, for a period of one year from date of purchase, that all other parts and components of the product are free from defects in materials and workmanship (90 days if used by a professional contractor or if used as rental equipment). This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our facilities, normal wear and tear, or to lack of maintenance. We shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special or consequential damages arising from the use of our product. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation of exclusion may not apply to you. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS.

To take advantage of this warranty, the product or part must be returned to us with transportation charges prepaid. Proof of purchase date and an explanation of the complaint must accompany the merchandise. If our inspection verifies the defect, we will either repair or replace the product at our election or we may elect to refund the purchase price if we cannot readily and quickly provide you with a replacement. We will return repaired products at our expense, but if we determine there is no defect, or that the defect resulted from causes not within the scope of our warranty, then you must bear the cost of returning the product.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

**3491 Mission Oaks Blvd. • PO Box 6009 • Camarillo, CA 93011 • (800) 444-3353**

**Record Product's Serial Number Here:**

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**Note:** If product has no serial number, record month and year of purchase instead.

**Note:** Some parts are listed and shown for illustration purposes only, and are not available individually as replacement parts.